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**PHARMACYCLICS ADDITIONAL DATA AND NEW ANALYSES FROM PIVOTAL  
PHASE 3 SMART TRIAL PRESENTED AT ASCO 2006**

*-- Data support company's decision to file New Drug Application for Xcytrin to FDA --*

*-- Conference call at 9:00 a.m. Eastern Time today --*

**SUNNYVALE, Calif., June 3, 2006** – Pharmacyclics, Inc. (NASDAQ: PCYC) today announced that additional new data and analyses supporting the company's decision to file a New Drug Application (NDA) for Xcytrin<sup>®</sup> (motexafin gadolinium) Injection, were presented at the 2006 Annual Meeting of the American Society of Clinical Oncology (ASCO). This abstract was selected by the ASCO Scientific Program Committee to be featured in the "2006 Best of ASCO Meetings" in June, which feature the premier abstracts representing the most relevant, cutting-edge research in oncology today.

According to the new data analyses, which adjust for treatment arm imbalances in the company's Phase 3 randomized, controlled SMART (Study of Neurologic Progression with **M**otexafin **G**adolinium **A**nd **R**adiation **T**herapy) trial, Xcytrin appeared to significantly prolong time to neurologic progression (TNP), the primary endpoint of the study, in non-small cell lung cancer (NSCLC) patients with brain metastases (i.e., lung cancer that has spread to the brain from another part of the body).

"In the intent-to-treat analysis corrected for treatment arm imbalance, Xcytrin plus whole brain radiation therapy (WBRT) significantly prolonged the time to neurologic progression compared

to WBRT alone,” said Minesh P. Mehta, M.D., professor and chairman of Human Oncology and professor of Neurological Surgery at the University of Wisconsin Medical School who presented the data. “This study indicates that prompt treatment of patients with brain metastases favorably affects treatment outcome and that the benefit of Xcytrin is greatest in patients receiving earlier use of WBRT. This study also highlights the differences in treatment practices in different countries and how these factors may affect outcome.”

The SMART trial enrolled 554 patients at 94 centers in North America, Europe and Australia, and compared the safety and efficacy of WBRT alone to WBRT plus Xcytrin. The three largest enrolling areas were North America (63%), France (21%) and Germany (8%). The primary pre-specified endpoint of time to neurologic progression was measured from the date of randomization on the study to the time of neurologic progression as determined by a blinded events review committee. Results from the trial indicated that there were substantial differences in the management of patients with brain metastases in North America versus Europe, particularly in France. In some centers in France, there was a significant treatment delay between diagnosis and randomization on the trial. Overall, mean time from brain metastases diagnosis to randomization for the Xcytrin arm was 4.3 weeks versus 3.3 weeks for the control arm, an imbalance that adversely affected outcomes in the Xcytrin arm of the study.

In the intent-to-treat population of 554 patients, the median time to neurologic progression was 15.4 months for those receiving WBRT plus Xcytrin compared to 10.0 months for patients treated with WBRT alone ( $P=0.12$ , hazard ratio=0.78), a trend in favor of the Xcytrin-treated arm. However, analyses correcting for the imbalance in treatment delay showed that, in the intent-to-treat population, median time to neurologic progression was 15.5 months for those receiving WBRT plus Xcytrin compared to 10.2 months for the control arm ( $P=0.05$ ). See Table 1.

In North America, 59.8% of patients enrolled in the study received WBRT or WBRT plus Xcytrin within two weeks of brain metastases diagnosis, 90.3% received treatment within four weeks of

diagnosis, and only 9.8% received treatment beyond four weeks from diagnosis. In France, 22% of patients received treatment within two weeks of brain metastases diagnosis, 43.6% received treatment within four weeks of diagnosis, and 56.4% of patients received treatment beyond four weeks from diagnosis. In many cases, randomization was delayed for months. Some of the reasons for these delays were use of chemotherapy as the initial treatment for brain metastases instead of WBRT or logistical delays in gaining access to WBRT. See Table 2.

The time interval between brain metastases diagnosis and use of WBRT or randomization to the protocol was a determinant of treatment outcome. The longer interval resulted in a poorer outcome in the control patients and also abrogated the benefit of Xcytrin. In the control arm, the median time to neurologic progression (measured from randomization to progression) was 10.0, 8.8 and 8.8 months for those patients receiving WBRT within 2 weeks, 4 weeks and 8 weeks, respectively, of diagnosis. In the Xcytrin treatment arm, the median time to neurologic progression was 24.2, 24.2 and 15.4 months for patients receiving WBRT plus Xcytrin within 2 weeks, 4 weeks and 8 weeks, respectively, of diagnosis.

Median time to neurologic progression in the North American patients (N=348) was 24.2 months for those receiving WBRT plus Xcytrin versus just 8.8 months for those receiving WBRT alone (P=0.004, hazard ratio = 0.53).

Xcytrin was also very well tolerated with the most common drug-related grade 3 and 4 adverse events being hypertension (4%), elevated liver enzymes (3%) and fatigue (3%), all of which were reversible. Use of Xcytrin did not compromise ability to deliver WBRT.

805 patients with brain metastases from non-small cell lung cancer have been enrolled in two randomized trials comparing Xcytrin plus WBRT to WBRT alone. Results have been consistent across these trials. Analysis of the combined data from these trials show an Xcytrin treatment benefit (P=0.016) for the primary endpoint of time to neurologic progression.

“The data presented at ASCO for the intent-to-treat population form the basis of our decision to file the NDA with the U.S. Food and Drug Administration, scheduled for later this year,” said Richard A. Miller, M.D., president and chief executive officer of Pharmacyclics. “More than 800 patients have been treated in randomized trials for brain metastases from lung cancer with Xcytrin to date, and we believe we have demonstrated a significant treatment effect combined with a favorable safety profile that could help benefit this underserved patient population.”

### **About Lung Cancer and Brain Metastases**

According to the National Cancer Institute, over 170,000 patients will be diagnosed with lung cancer this year in the United States. Brain metastases are estimated to occur in up to 50% of lung cancer patients.

Brain metastases occur when cancer cells spread to the brain and grow, causing major neurologic complications and, in most cases, death. Patients with brain metastases usually suffer serious deterioration of neurologic and neurocognitive function such as loss of short-term memory, compromised verbal skills and fine motor coordination, and reduction in cognitive performance. Most patients with brain metastases have multiple lesions and are not candidates for surgical resection or radiosurgery. The goal of whole brain radiation therapy is to reverse or prevent neurological deterioration and prevent death due to tumor progression in the brain.

### **About Xcytrin**

Pharmacyclics is developing Xcytrin as an anti-cancer agent with a novel mechanism of action that is designed to selectively concentrate in tumors and induce apoptosis (programmed cell death). Xcytrin is a redox-active drug that has been shown to disrupt redox-dependent pathways in cells and inhibit oxidative stress related proteins. Its multifunctional mode of action provides the opportunity to be used in a broad range of cancers.

## Relevant Data Tables

**Table 1: TIME TO NEUROLOGIC PROGRESSION**

Measured from	Median Time to Progression (mo.)		P Value/Hazard Ratio
	Xcytrin	Control	
Randomization	15.4	10.0	0.12/0.78
Brain Metastases Diagnosis	15.5	10.2	0.05/0.75

**Table 2: PERCENT OF PATIENTS ENROLLED BY TIME FROM  
BRAIN METASTASES TO RANDOMIZATION**

	≤ 2 weeks	2 – 4 weeks	> 4 weeks
Overall (N = 554)	49.5	29.1	21.5
North America (N = 348)	59.8	30.5	9.8
France (N = 114)	22.2	21.4	56.4

## Conference Call Details

Pharmacyclics will hold a conference call Monday, June 5 at 9:00 a.m. EDT to discuss the ASCO presentation. To participate in the conference call, please dial 888-499-6736 for domestic callers and 706-679-5597 for international callers, and reference conference passcode 9100260. In addition, this call is being webcast and can be accessed at Pharmacyclics' website at [www.pharmacyclics.com](http://www.pharmacyclics.com) by clicking on the investor section and following the links from there. Please connect to Pharmacyclics' website several minutes prior to the start of the live webcast to ensure adequate time for any software download that may be necessary. A telephone replay of the conference call will be available through Monday, June 12, 2006. To access the replay, please dial 800-642-1687 for domestic callers and 706-645-9291 for international callers and reference conference passcode 9100260.

## About Pharmacyclics

Pharmacyclics is a pharmaceutical company developing innovative products to treat cancer,

atherosclerosis and other serious diseases. The company is leveraging its small-molecule drug development expertise to build a pipeline in oncology and other diseases based on a wide range of targets, pathways and mechanisms. Its lead product, Xcytrin, has completed Phase 3 clinical testing in lung cancer brain metastases and several Phase 1 and Phase 2 clinical trials are ongoing with Xcytrin, either as a single agent or in combination with chemotherapy and/or radiation in multiple cancer types. Pharmacyclics has other product candidates in earlier-stage development for cancer, atherosclerosis and inflammatory diseases. More information about the company, its technology, and products can be found at [www.pharmacyclics.com](http://www.pharmacyclics.com). Pharmacyclics<sup>®</sup>, Xcytrin<sup>®</sup> and the "pentadentate" logo<sup>®</sup> are registered trademarks of Pharmacyclics, Inc.

NOTE: Other than statements of historical fact, the statements made in this press release about enrollment and future plans for our clinical trials, progress of and reports of results from preclinical and clinical studies, including results from our SMART trial, clinical development plans and product development activities are forward-looking statements, as defined in the Private Securities Litigation Reform Act of 1995. The words "potential," "project," "believe," "will," "continue," "plan," "expect," "intend," "anticipate," variations of such words, and similar expressions also identify forward-looking statements, but their absence does not mean that the statement is not forward-looking. The forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties that may cause actual results to differ materially from those in the forward-looking statements. Factors that could affect actual results include risks associated with the initiation, timing, design, enrollment and cost of clinical trials; unexpected delays in and unanticipated increases in costs related to our preclinical studies, clinical trials and preparation of materials for submission to the FDA as part of our NDA filing; the fact that data from preclinical studies and Phase 1 or Phase 2 clinical trials may not necessarily be indicative of future clinical trial results; our ability to obtain future financing and fund the preparation of our NDA filing and the product development of our pipeline; the outcome of our discussions with the FDA; our ability to prepare and submit an NDA on a timely basis or at all; the possibility that the FDA refuses to accept any NDA we submit; the possibility that additional data or studies may be required before the NDA is accepted for filing or approved by the FDA; our ability to establish successful partnerships and collaborations with third parties; the regulatory approval process in the United States and other countries; and future capital requirements. For further information about these risks and other factors that may affect the actual results achieved by Pharmacyclics, please see the company's reports as filed with the U.S. Securities and Exchange Commission from time to time, including but not limited to its quarterly report on Form 10-Q for the period ended March 31, 2006. Forward-looking statements contained in this announcement are made as of this date, and we undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

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